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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,113	06/21/2001	Yozo Shoji	210095US2	4712
22850	7590	08/10/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			AL AUBAIDI, RASHA S	
			ART UNIT	PAPER NUMBER
			2642	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/885,113

Applicant(s)

SHOJI ET AL.

Examiner

Rasha S. AL-Aubaidi

Art Unit

2642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2,3,5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3,5 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/18/03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed on May 17, 2005 has been entered. Claims 2-3 and 5-6 have been amended. No claims have been canceled. No claims have been added. Claims 2-3 and 5-6 are still pending in this application, with claims 2, 3, 5, and 6 being independent.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2, 3, 5, and 6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The support for the new limitations recited in the claims could not be found in paragraph [0016] of the specification as indicated by applicant. The only support is found in the specification in paragraphs [0032 and 0033], which is believed to be irrelevant. These paragraphs recite "using an amplifier or other such device having a non-linear effect".

***Claim Rejections - 35 USC § 103***

2. Claims 2-3 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Na (US PAT # 6,112,069) in view of Yamamoto et al (US PAT # 4,483,000).

Regarding claim 2, Na teaches a modulated transmission signal generator that produces a modulated radio transmission signal by using a local oscillation signal to up-convert the modulated signal to a radio frequency band (see col. 5, lines 60-65); a transmitter that transmits the local oscillation signal used by the modulated transmission signal generator together with the modulated radio transmission signal as a radio signal (see col. 5, lines 50-52 and col. 6, lines 12-20); and a receiver that receives a radio signal from the other radio station and down-converts the received signal to a modulated intermediate frequency band by generating a multiplication component of a modulated radio signal component and local oscillation signal component received from the other radio station (see col. 6, lines 20-27). The claimed "two-way radio communication system for a two-way communication between a first and a second radio stations" reads on a radio receiver in a radio communication system that has a receiver and transmitter (see col. 12, lines 30-32).

Na does not specifically teach the local oscillation signal is linearly superposed on the modulated transmission.

However, Yamamoto teaches a linear modulator responsive to a first signal in the baseband and a second signal in the radio frequency band for linearly modulating the second signal by the first signal to produce the data burst (see col. 2, lines 10-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of mixing/regenerating a signal from a first and a second band signal, as taught by Yamamoto, into the Na system in order to eliminate the crosstalk signal which is a common drawback in the digital communication (see col. 1, lines 55-58).

Claims 3 and 5-6 are rejected for the same reasons as discussed above with respect to claim 2.

### ***Response to Arguments***

5. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rasha S AL-Aubaidi whose telephone number is (571) 272-7481. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F. Matar, can be reached on (571) 272-7488.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2642

**Examiner**  
**Rasha S. Al-Aubaidi**  
**Art Unit 2642**  
**07/26/2005**

A handwritten signature in black ink, appearing to read "Ahmad Matar". The signature is fluid and cursive, with the first name "Ahmad" and last name "Matar" clearly distinguishable.

**AHMAD F. MATAR**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2700**